	Major Capital Project							
Project	Cincinnati Streetcar	Today's Date		8/22/07				
Location	Cincinnati CBD (Single-track figure-eight with on	MSF Junction	Yr of Base Year Dollars		2007			
Pjt. No.	0001 (this number is automatically assigne							
	Phase	Feasibility	easibility			Yr of Revenue Ops		
	Contracting Method	·			Forecast Year		2012 2025	
Number of Route Miles			,			Number of Stations		
inumber of Route Miles			13.9			Number of Stations		
		Quantity	Base Yr Dollars Total (X\$000)	Base Year Dollars Unit Cost (X\$000)	Base Dollars % of Construction		YOE Dollars Total (X\$000)*	Project sponsor's notes, commentary, etc. to clarify usage of categories and line items, to note special conditions, reasons for cost change, etc.
1.00 GUID	DEWAY & TRACK ELEMENTS (route miles)	4.50	18,588	\$ 4,131	43%	22%	22,066	
	Guideway: At-grade exclusive right-of-way							
	Guideway: At-grade semi-exclusive (allows cross-traffic)	4.50	4.077					Civil Boodway Consusts Boomstwisting at \$100/lf
	Guideway: At-grade in mixed traffic Guideway: Aerial structure	4.50	4,277					Civil Roadway - Concrete Reconstruction at \$180/l.f.
	Guideway: Built-up fill							
	Guideway: Underground tunnel							
	Guideway: Retained cut or fill							
	Track: Direct fixation							
	Track: Embedded		11,912					4.7 miles of track (mainline+msf conn+msf tracks) at \$480/l.f.
1.11	Track: Ballasted							
1.12	Track: Special (switches, turnouts)		2,400					15 turnouts required - 4 on line; 4 at "MSF Jct."; 7 in MSF
1.13	Track: Vibration and noise dampening							Track is placed where block-outs were poured on bridges
2.00 STAT	TIONS, STOPS, TERMINALS, INTERMODAL (number)	18	1,980	\$ 110	5%	2%	2,336	
2.01	At-grade station, stop, shelter, mall, terminal, platform	18	1,980	\$ 110				18 side platform stations at \$110,000 each
2.02	Aerial station, stop, shelter, mall, terminal, platform							
2.03	Underground station, stop, shelter, mall, terminal, platform							
2.04	Other stations, landings, terminals: Intermodal, ferry, trolley, etc.							
	Joint development							
	Automobile parking multi-story structure							
	Elevators, escalators							
	PORT FACILITIES: YARDS, SHOPS, ADMINISTRATION	4.50	5,000	\$ 1,111	12%	6%	6,202	
	Administration Building: Office, sales, storage, revenue counting							
	Light Maintenance Facility		5,000					Includes bldgs., equipment, utilities, roads, fencing
	Heavy Maintenance Facility							
	Storage or Maintenance of Way Building Yard and Yard Track							
		1.50	2.400	\$ 756	00/	10/	2 074	
	WORK & SPECIAL CONDITIONS  Demolition, Clearing, Earthwork	4.50	3,400	\$ 756	8%	4%	3,871	
	Site Utilities, Utility Relocation		3,400					\$850,000 per mile allowance
	Haz. mat'l, contam'd soil removal/mitigation, ground water treatments		3,700					No enve mit or drainage allowance for mainline, MSF leads
4.04	Environmental mitigation, e.g. wetlands, historic/archeologic, parks							To site the or drainage anowariou for maining, wor leads
4.05	Site structures including retaining walls, sound walls		<u> </u>					Main Worksheet 11/15/2

4.07 Automobile, buts, van accessways including roads, parking joins 4.80 Temporary facilities and off-berindized costs during construction and sprace of protection and pr			_	_			•		
4.09   Fulls and other indirect costs during construction   4.09   Fulls and crossing protection   5.01 Train control and signals   5.02 Trains control and signals   5.03 Tra	4.06 Walks, plazas, landscape, furniture, lighting, bike fac., signage, fencing			_					
4.09   Public Art									
5.00 SYTEMS				_					Included in per-station allocations
Solid Train control and signals and crossing protection   500   750			14 349	\$	3 189	33%	17%	17 797	included in per-station allocations
5.02 Traffic signals and crossing protection   3.30		1.00	14,040	Ψ	0,100	<b>30</b> /0	1770	11,101	-
Solid   Traction power supply: substations   Solid   Traction power distribution: catenary and third rail   Solid	-		600	-					6 new traffic signals at \$100,000 each
S.0.8   Traction power distribution: cationary and third rail   S.0.89   2.5.50									
Solid Communications plus central control equipment allocation   2.50   2.80				-					` '
Solid Fare collection system and equipment   2,880	·		<u> </u>	-					
Son Contraction Subtrait (1-5)	5.06 Fare collection system and equipment			-					
Construction Subtotal (1-5)			,						· · · · · · · · · · · · · · · · · · ·
Son Project Management for Design and Construction 8.00 French Surveys, Testing, Investigation, Inspection 8.00 French Surveys, Testing, Investigation, Inspection 8.00 Surveys, Testing, Investigation, Inspection 9.00 CONTINGENCY   1,083	Construction Subtotal (1-5)	4.50	43.317	\$	9.626	100%	52%	52,271	
6.01 Purchase or lease state 6.02 Relocation of existing households and businesses 7.00 VEHICLES (number) 6. 19,800 \$ 3,300 7.01 Light Rall 7.03 Commuter Rall 7.04 Bus 7.05 Other 7.06 Non-revenue vehicles 7.07 Syne parts 8.00 SOFT COSTS 8.01 Prelimitary Engineering 8.02 Final Design 8.03 Project Management for Design and Construction 8.04 Construction Administration & Management 8.05 Insurance, Legal, Permits, Review Fees 8.06 Surveys, Testing, Investigation, Inspection 8.07 Spare proce Account Work 8.08 Surveys, Testing, Investigation, Inspection 8.07 Spare proce Account Work 8.07 Spare proce Account Work 8.08 Surveys, Testing, Investigation, Inspection 8.09 Construction Administration & Management 8.00 SOTT COTS Insurance, Legal, Permits, Review Fees 8.01 Prelimitary Engineering 8.02 Final Design 8.03 Project Management for Design and Construction 8.04 Construction Administration & Management 8.05 Insurance, Legal, Permits, Review Fees 8.06 Surveys, Testing, Investigation, Inspection 8.07 Agency Force Account Work 1.262 9.00 FINANCE CHARGES 1.083 1.093 1.00 CONTINGENCY  Total Project Cost (1-10)  4.50 83,661 \$ 16,591 100% 101,799  YOE Construction Cost per Mile (X000)  YOE Total Project Cost per Mile (X000)  S 22,682 22%  South State Strong Administration (3-10)(1-5)	, ,	2.50	_		-			-	
Contracting households and businesses				Ť			0.0		Maintenance and storage facility (MSF)
Total Final   Commuter Rail   Commuter Rail Rail   Commuter Rail   Commuter Rail   Commuter Rail   Commuter	6.02 Relocation of existing households and businesses								J , , ,
7.02 Heavy Rail 7.03 Commuter Rail 7.04 Bus 7.05 Other 7.06 Non-revenue vehicles 7.07 Spare parts 8.00 SOFT COSTS 8.01 Preliminary Engineering 8.02 Final Design 8.02 Final Design 8.03 Project Management for Design and Construction 8.04 Construction Administration & Management 8.05 Surveys, Testing, Investigation, Inspection 8.06 Surveys, Testing, Investigation, Inspection 9.00 FINANCE CHARGES 1.083 7.09 FINANCE CHARGES 1.083 7.00 Sa, 861 S 18,591 7.00 CONTINGENCY 8.00 Source, Legal, KNOOD 8.00 Sa, 661 S 18,591 8.00 Surveys, Testing, Investigation, Inspection 8.01 State of the survey element; incl. training/start 8.02 Sinal Surveys, Testing, Investigation, Inspection 8.03 Finance, Legal, Force Account Work 8.04 Construction Cost per Mile (X000) 9.05 FINANCE CHARGES 1.083 1.083 1.084 8.06 Surveys, Testing, Investigation, Inspection 9.00 FINANCE CHARGES 1.083 1.083 1.084 8.084  7.080 Surveys, Testing, Investigation, Inspection 9.00 FINANCE CHARGES 1.083 1.083 1.084 8.084  7.080 FINANCE CHARGES 1.083 1.083 1.084 8.084 1.084 9.00 FINANCE CHARGES 1.083 1.083 1.084 9.00 FINANCE CHARGES 1.084 9.00 FINANCE CHARGES 1.085 9.00 FINANCE CH	7.00 VEHICLES (number)	6	19,800	\$	3,300		24%	25,109	
7.03 Commuter Rail 7.04 Bus 7.05 Other 7.05 Other 7.06 Non-revenue vehicles 7.07 Spare parts 8.00 SOFT COSTS 8.01 Preliminary Engineering 8.02 Final Design 8.03 Project Management for Design and Construction 8.04 Construction Administration & Management 8.05 Surveys, Testing, Investigation, Inspection 8.06 Surveys, Testing, Investigation, Inspection 8.07 Agency Force Account Work 9.00 FINANCE CHARGES 1,262 1,262 1,262 1,263 1,262 2,365 1,262 2,365 1,262 2,365 1,262 2,365 1,262 2,365 1,262 2,365 1,364 2,365 1,364 2,365 2,36	7.01 Light Rail	6	19,800	\$	3,300				Low-floor, 750 vDC articulated tramcar design - \$3.3 million ea
7.04 Bus 7.05 Other 7.06 Non-revenue vehicles 7.07 Spare parts 8.00 SOFT COSTS 8.01 Preliminary Engineering 8.02 Final Design 8.03 Project Management for Design and Construction 8.04 Construction Administration & Management 8.05 Surveys, Testing, Investigation, Inspection 8.06 Surveys, Testing, Investigation, Inspection 8.07 Agency Force Account Work 9.00 FINANCE CHARGES 1.003 CONTINGENCY 1.004 B3,661 \$18,591 \$100% \$101,799  YOE Construction Cost per Mile (X000) YOE Total Project Cost (1-10)  4.50 B3,661 \$18,591 \$100% \$101,799  Included in per-car price 1.15% 15,059 1.15% 15,059 1.15% 15,059 1.15% 15,059 1.15% 15,059 1.15% 11,059 1.15	7.02 Heavy Rail								
7.05 Other 7.06 Non-revenue vehicles 7.07 Spare parts 8.00 SOFT COSTS 8.01 Preliminary Engineering 8.02 Final Dosigin 8.03 Project Management for Design and Construction 8.04 Construction Administration & Management 8.05 Insurance, Legal, Permits, Review Fees 8.06 Surveys, Testing, Investigation, Inspection 8.07 Agency Force Account Work 9.00 FINANCE CHARGES 10.00 CONTINGENCY 10.00 CONTINGENCY 10.00 CONTINGENCY 10.00 COST S 1.85 Insurance, Legal, Permits, Review Fees 1.262 9.00 FINANCE CHARGES 1.083 1.083 1.083 1.083 1.083 1.083 1.083 1.084 1.085 1.085 1.086 1.087 1.088 1.089 1.089 1.080	7.03 Commuter Rail								
7.06 Non-revenue vehicles	7.04 Bus								
1.00	7.05 Other								
8.00 SOFT COSTS  8.01 Preliminary Engineering 8.02 Final Design 8.03 Project Management for Design and Construction 8.04 Construction Administration & Management 8.05 Insurance, Legal, Permits, Review Fees 8.06 Surveys, Testing, Investigation, Inspection 8.07 Agency Force Account Work 9.00 FINANCE CHARGES 1.083 1.080 1.262 9.00 FINANCE CHARGES 1.000 CONTINGENCY 1.000 CONTINGENCY  Total Project Cost (1-10) 4.50 83,661 \$ 18,591	7.06 Non-revenue vehicles								
8.01   Preliminary Engineering   1,894   5,049   8% of items 1 through 7   8.02   Final Design and Construction   5,049   8% of items 1 through 7   8% of items 1 through 7   8% of items 1 through 7   10cluded in line 8.07   10cluded in line 8.0	7.07 Spare parts								Included in per-car price
8.02 Final Design   5,049   8.03 Project Management for Design and Construction   2,525   8.04 Construction Administration & Management   2,525   8.05 Insurance, Legal, Permits, Review Fees   631   1,262   2%   8.06 Surveys, Testing, Investigation, Inspection   1,262   2%   8.07 Agency Force Account Work   1,262   1,083	8.00 SOFT COSTS	4.50	12,623	\$	2,805		15%	15,059	
8.03 Project Management for Design and Construction   2,525   8.04 Construction Administration & Management   2,525   8.05 Insurance, Legal, Permits, Review Fees   631   1% of items 1 through 7   2% of items 1 through 7   2% of items 1 through 7; no survey element; incl. training/start 2% of items 1 through 7; no survey element; incl. training/start 2% of items 1 through 7; no survey element; incl. training/start 2% of items 1 through 7; no survey element; incl. training/start 2% of items 1 through 7; no survey element; incl. training/start 2% of items 1 through 7   1,275   2% of items 1 through 7   2% of i	8.01 Preliminary Engineering		1,894						3% of items 1 through 7
8.04 Construction Administration & Management 8.05 Insurance, Legal, Permits, Review Fees 8.06 Surveys, Testing, Investigation, Inspection 8.07 Agency Force Account Work 9.08 FINANCE CHARGES 10.00 CONTINGENCY 10.00 CONTINGENCY 10.00 Construction Cost per Mile (X000) YOE Construction Cost per Mile (X000) YOE Total Project Cost for Mile (X000) YOE Total Project Cost & Contingency/Construction (8+10)/(1-5)  8.04 Construction Administration & Management 2,525 631 1,262 2,262 2,262 2,262 4,4% of items 1 through 7 1,262 2,263 2,261 2,261 2,261 2,262 2,262 2,262 4,361 4,361 1,262 2,262 2,362 2,	8.02 Final Design		5,049						8% of items 1 through 7
8.05 Insurance, Legal, Permits, Review Fees  8.06 Surveys, Testing, Investigation, Inspection  8.07 Agency Force Account Work  9.00 FINANCE CHARGES  10.00 CONTINGENCY  Total Project Cost (1-10)  4.50 83,661 \$ 18,591 \$ 100% 101,799  YOE Construction Cost per Mile (X000)  YOE Total Project Cost per Mile (X000)  YOE Total Project Cost per Mile (X000)  YOE Total Project Cost & Contingency/Construction (8+10)/(1-5)  8.06 Surveys, Testing, Investigation, Inspection  1,262  2% of items 1 through 7  2% of items 1 through 7  2% of items 1 through 7  Component-contingency method applied  YOE Dollars reflect 2010  YOE Dollars reflect 2010	8.03 Project Management for Design and Construction								Included in line 8.07
8.06 Surveys, Testing, Investigation, Inspection 8.07 Agency Force Account Work 9.00 FINANCE CHARGES 1,083 10.00 CONTINGENCY 1,262 1,083 1,083 1,275 1,083 1,275 1,083 2% of items 1 through 7; no survey element; incl. training/start 2% of items 1 through 7 Component-contingency method applied  YOE Construction Cost per Mile (X000) YOE Total Project Cost per Mile (X000) YOE Total Project Cost per Mile (X000) 1,1,616 YOE Total Project Cost per Mile (X000) 1,1,616 YOE Total Project Cost Secontingency/Construction (8+10)/(1-5) 45%	8.04 Construction Administration & Management		2,525						4% of items 1 through 7
8.07 Agency Force Account Work 9.00 FINANCE CHARGES 10.00 CONTINGENCY 1,083 10.00 CONTINGENCY 1,083 10.00 CONTINGENCY 1,083 2% of items 1 through 7 Component-contingency method applied  Total Project Cost (1-10) 4.50 83,661 1,616 YOE Total Project Cost per Mile (X000) YOE Total Project Cost per Mile (X000) 11,616 YOE Total Scalation (YOE-Base Yr)/Base Yr Base Yr. Soft Costs & Contingency/Construction (8+10)/(1-5) 45%	8.05 Insurance, Legal, Permits, Review Fees		631						1% of items 1 through 7
1,083   1%   1,275   10.00 CONTINGENCY   6,838   1%   8%   8,084   Component-contingency method applied	8.06 Surveys, Testing, Investigation, Inspection		1,262						2% of items 1 through 7; no survey element; incl. training/start
10.00 CONTINGENCY         6,838         8%         8,084         Component-contingency method applied           Total Project Cost (1-10)         4.50         83,661         \$ 18,591         100%         101,799         YOE Dollars reflect 2010           YOE Construction Cost per Mile (X000)         \$ 11,616         \$ 22,622         \$ 22,622         \$ 22%           Total Escalation (YOE-Base Yr)/Base Yr         22%         \$ 45%         \$ 45%	8.07 Agency Force Account Work		1,262						2% of items 1 through 7
Total Project Cost (1-10)         4.50         83,661         \$ 18,591         100%         101,799         YOE Dollars reflect 2010           YOE Construction Cost per Mile (X000)         \$ 11,616         \$ 22,622         \$ 22,622         \$ 22,622         \$ 22%         \$ 22%         \$ 45%         \$ 45%         \$ 45%         \$ 45%         \$ 20,022         \$ 20,022         \$ 20,022         \$ 22% <td< td=""><td>9.00 FINANCE CHARGES</td><td></td><td>1,083</td><td></td><td></td><td></td><td>1%</td><td>1,275</td><td></td></td<>	9.00 FINANCE CHARGES		1,083				1%	1,275	
YOE Construction Cost per Mile (X000)  YOE Total Project Cost per Mile (X000)  Total Escalation (YOE-Base Yr)/Base Yr  Base Yr. Soft Costs & Contingency/Construction (8+10)/(1-5)  \$ 11,616  22%  45%	10.00 CONTINGENCY		6,838				8%	8,084	Component-contingency method applied
YOE Construction Cost per Mile (X000)  YOE Total Project Cost per Mile (X000)  Total Escalation (YOE-Base Yr)/Base Yr  Base Yr. Soft Costs & Contingency/Construction (8+10)/(1-5)  \$ 11,616  \$ 22,622  22%  45%	Table 19 (2014 40)	1.50	00.004		10.501		4000/	101 700	VOE D-11-11-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1
YOE Total Project Cost per Mile (X000)  \$ 22,622  Total Escalation (YOE-Base Yr)/Base Yr  Base Yr. Soft Costs & Contingency/Construction (8+10)/(1-5)  \$ 22,622  45%	Total Project Cost (1-10)	4.50	83,661	\$	18,591		100%	101,799	YOE Dollars reflect 2010
YOE Total Project Cost per Mile (X000)  \$ 22,622  Total Escalation (YOE-Base Yr)/Base Yr  Base Yr. Soft Costs & Contingency/Construction (8+10)/(1-5)  \$ 22,622  45%	YOE Construction Cost per Mile (X000)								
Total Escalation (YOE-Base Yr)/Base Yr  Base Yr. Soft Costs & Contingency/Construction (8+10)/(1-5)  45%									
Base Yr. Soft Costs & Contingency/Construction (8+10)/(1-5) 45%									
	Base Yr. Soft Costs & Contingency/Construction (8+10)/(1-5)								